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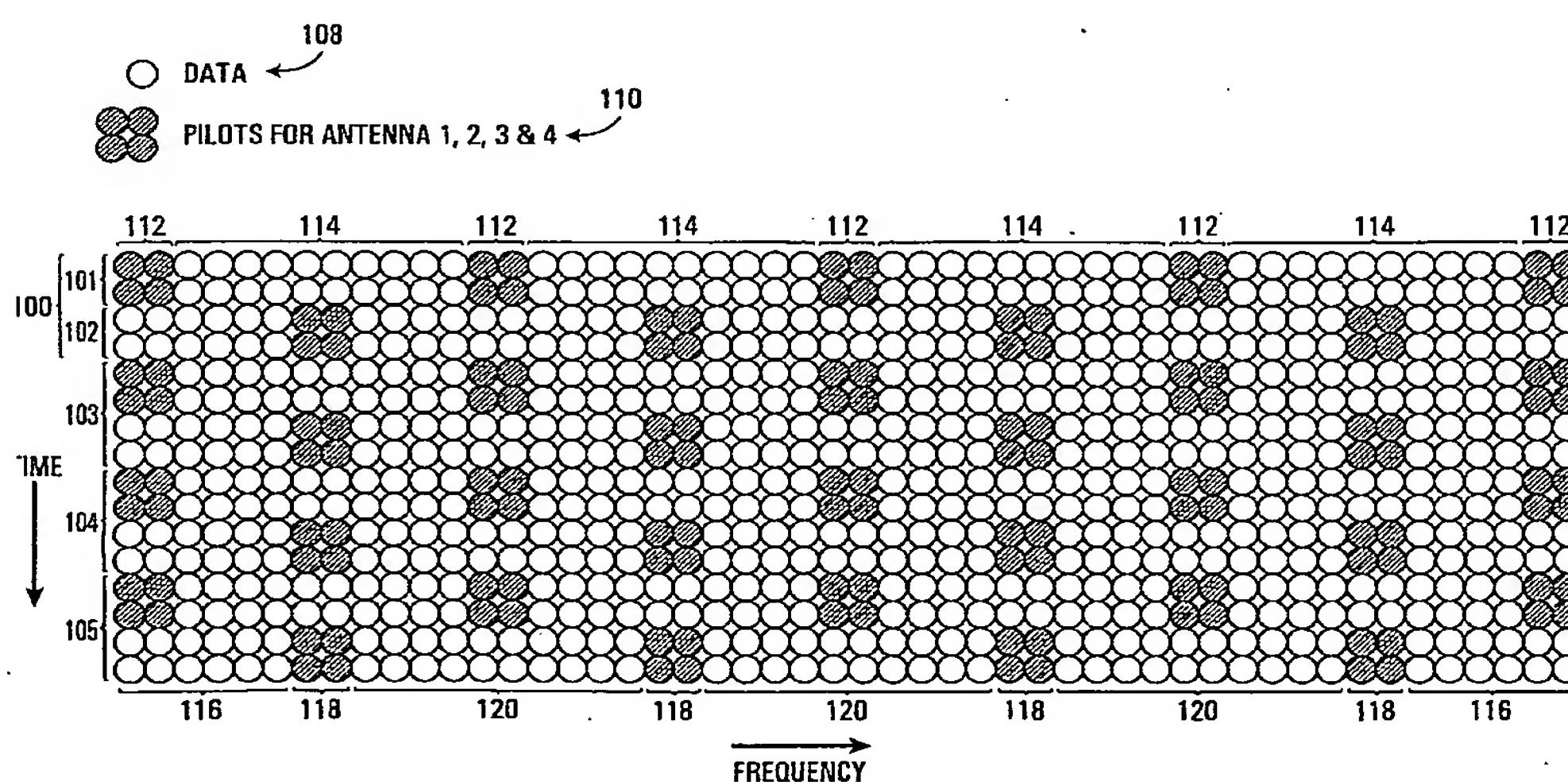
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(54) Title: PILOT DESIGN FOR OFDM SYSTEMS WITH FOUR TRANSMIT ANTENNAS



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(57) Abstract: Pilot, preamble and midamble patterns are provided that are particularly suited for four transmit antenna OFDM systems. Pilots are inserted in a scattered manner for each of the four antennas, either uncoded, space-time coded in pairs, space-time frequency coded in pairs, or space-time-frequency coded.